

Notice of Allowability

Application No.

10/636,114

Examiner

Cam N Nguyen

Applicant(s)

CHATURVEDI ET AL.

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to a divisional application of 10/165,065 (now US Pat. 6,656,873) & a telephone communication on 5/10/04.
2. ☒ The allowed claim(s) is/are 9-19 (which have been renumbered 1-11).
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>5/10/04</u> |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>12/29/03</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with *Ms. Marcella M. Bodner* on *May 10, 2004*.

2. The application has been amended as follows:

In the Claims

Claim 11, line 2, a comma -- , -- has been inserted after "depositing".

Claim 11, line 2, a comma -- , -- has been inserted after "other".

Claim 12, line 2, "accomplished" has been changed to --carried out--.

Claim 13, line 2, "accomplished" has been changed to --carried out--.

Claim 14, last line, the second period "." has been deleted.

Claim 16, line 2, "done" has been changed to --carried out--.

Claim 17, line 1, --according to claim 10-- has been inserted after "nitrile".

Claim 17, line 2, "done" has been changed to --carried out--.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

As concern with claims 9 & 16, the prior art does not disclose or fairly suggest a

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process for producing an unsaturated carboxylic acid using a catalyst produced by a process as recited in claim 9. While processes of producing mixed metal oxide catalyst compositions are known in the art, a process requiring vapor depositing at least one dopant metal onto the surface of a mixed metal oxide catalyst having the empirical formula $A_aD_bE_cX_dO_e$ satisfying a, b, c, d, and e (as specified in claim 9) distinguishes over the prior art of record.

As concern with claims 10 & 17, the prior art does not disclose or fairly suggest a process for producing an unsaturated nitrile using a catalyst produced by a process as recited in claim 10. While processes of producing mixed metal oxide catalyst compositions are known in the art, a process requiring vapor depositing at least one dopant metal onto the surface of a mixed metal oxide catalyst having the empirical formula $A_aD_bE_cX_dO_e$ satisfying a, b, c, d, and e (as specified in claim 10) distinguishes over the prior art of record.

As concern with claims 11-13, the prior art does not disclose or fairly suggest a process for preparing a catalyst requiring vapor depositing, one upon the other, a plurality of thin films, each thin film containing at least one of the elements A, D, E and X to form a composite of A, D, E and X.

As concern with claim 14, the prior art does not disclose or fairly suggest a process for preparing a catalyst requiring vapor depositing, one upon the other, a plurality of thin films, each thin film containing at least one of the elements Mo, V, Nb and X to form a composite of Mo, V, Nb and X.

As concern with claim 15, the prior art does not disclose or fairly

suggest a process for preparing a catalyst requiring vapor depositing, one upon the other, a plurality of thin films, each thin film containing at least one of the elements Mo, V, Te and X¹ to form a composite of Mo, V, Nb and X¹.

As concern with claim 18, the prior art does not disclose or fairly suggest a process for producing an unsaturated carboxylic acid using a catalyst produced by a process as recited in the claim, which requires vapor depositing, one upon the other, a plurality of thin films, each thin film containing at least one of the elements A, D, E and X to form a composite of A, D, E and X.

As concern with claim 19, the prior art does not disclose or fairly suggest a process for producing an unsaturated nitrile using a catalyst produced by a process as recited in the claim, which requires vapor depositing, one upon the other, a plurality of thin films, each thin film containing at least one of the elements A, D, E and X to form a composite of A, D, E and X.

There is no motivation to combine the teachings of the references together.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Citations

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

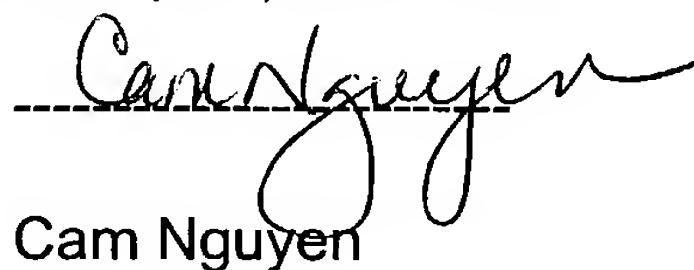
Chaturvedi et al. (US Pat. 6,624,111 B2), Chaturvedi et al. (US Pat. 6,504,053 B1), Bogan, Jr. et al. (US Pat. 6,710,207 B2), Bogan, Jr. (US Pat. 6,472,552 B1), Karim et al. (US Pat. 6,531,631 B1), Karim et al. (US Pat. 6,258,992 B1), Karim et al. (US Pat. 6,143,921), Tu et al. (US Pat. 6,512,141 B2), Jachow et al. (US Pat. 6,541,664 B1), Kayou et al. (US Pat. 6,166,241), Lin et al. (US Pat. 6,180,825 B1), Yamamatsu et al. (US Pat. 5,191,116), Kitson (US Pat. 5,210,293), & Neumann et al. (US Pat. 5,449,821) are cited for related art.

Conclusion

5. Claims 9-19 are originally pending in the application. Claims 9-19 are allowed.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Cam Nguyen, whose telephone number is (571) 272-1357. The examiner can normally be reached on M-F from 8:30 am. to 6:00 pm, with alternative Monday off.

The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to telephone number (571) 272-1700.


Cam Nguyen

Nguyen/cnn *CNN*

Primary Examiner

May 10, 2004

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